that it consists of two phases, and they say their own study suggests another possible modification of the procedure of Abderhalden which should take advantage of the property of the substratum to become sensitized by the specific serum so as later to give up dialyzable substances when placed in contact with any fresh human or animal serum. Such a method would permit the examination of serum taken at any time, no matter what the condition of the patient might be. The procedure is the following: After remaining over night in contact with suspected serum in the ice box, placenta (or any other substance, as the case may be) is centrifuged, washed with water to remove any serum which may adhere to it, and placed in a new thimble with any fresh serum that happens to be on hand. The best for this purpose is serum from a guinea-pig kept without food long enough (from six to eight hours) to free its blood from dialyzable ninhydrin reactive substances. It is necessary to first examine for pregnancy, since fresh serum from a female guinea-pig might give a positive reaction with placenta in the test, thus leading to error.

THE "AUTOLYSIN" TREATMENT FOR CANCER.

Modern science calls for proof—proof as indubitable and unqualified as the case will permit. Scientific men accept new theories and new alleged facts only when they are supported by reliable evidence. Especially is this true in the realm of scientific medicine. Unlike the exact sciences, there are in medicine so many elements which may vitiate definite conclusions that the careful physician is slow to accept claims made for new therapeutic agents. And rightly so; for human health and life are too valuable to be made the sport of untried theories and unsupported claims. In a world largely dominated by commercial instincts, this unwillingness on the part of the physician to accept, at its face value, every claim made for a new therapeutic product has long been a source of irritation to the exploiter. It is not surprising, then, that the refinements of twentieth century advertising have been brought to bear in overcoming the physician's caution—a caution exercised wholly in the interests of his patients; hence the spectacle, during recent years, of the exploitation of additions to materia medica—some of which may have had an appearance of at least quasi-scientific value—brought to the notice of the public, rather than to the medical profession, by every art known to the modern advertiser. At the same time a semblance of scientific standing has been given the products by publishing in such medical journals as would accept them articles describing these products. The theory, apparently, on which such methods are based is that by creating a sufficient demand on the part of the public for these products, the physician will be dragooned into using preparations which his sober judgment tells him have not passed through the refining fires of scientific investigation. It is only necessary to call to mind the Friedmann "consumption cure" campaign, and the resurrection of the discredited scopolamin-morphin anesthesia under the popular name of "Twilight Sleep," to realize the potentialities for harm that this method of exploitation carries.

The most recent example of this pernicious method of bringing into the public eye new therapeutic agents is exemplified in what has been called the "autolysin" treatment for cancer. Early in the publicity movement for this treatment "The Journal" urged caution, calling attention to the secrecy and the unscientific character of the formula. "Autolysin" was brought into the limelight of publicity chiefly through the medium of sensational newspaper and magazine articles. This was accomplished before the preparation had been so tried out as to establish, without question, its value or lack of value. Its exploitation makes the thoughtful wonder whether it belongs in the realm of scientific discovery or in that of crude commercialism. As is always to be found in such cases, the failures are minimized and the successes are heralded. Its use for all practical purposes has been wholly in the hands of its friends and promoters. Naturally, reports emanating from such sources must be looked on as **ex parte** statements, rather than as scientific records. The time has evidently come, as it will come in all such cases, when we may expect to hear the other side. A little while ago "The Journal" published a disclaimer from a Detroit physician whose name had been connected with one of the magazine articles boosting the treatment. Elsewhere in this issue is further evidence on the other side. Also, "The Journal" submits some correspondence relative to the exploitation of this new product, dealing with the commercial aspect of the case.

Some of the best brains in the world are working on the problem of the prevention and cure of cancer; so far the solution is not in sight. When it comes it will come as a gift of medical science to humanity. It will not come in the form of secret and mysterious combinations controlled by a few individuals to be doled out to those who are able, or willing, to pay the toll demanded. It will be determined after a series of experiments carefully conducted under scientific control in various institutions and under the observation of disinterested, scientific workers. Only under such conditions will it be possible to declare, with any degree of scientific accuracy, that a successful treatment has been established.

Whether the "autolysin" mixture may posses some elements of value in combating the scourge of cancer must be left to the future to decide. Even should it be found of use this would not alter the fact that the methods of exploitation have been unworthy of scientific men, and in their effects on the public, the very refinement of cruelty.—"Journal A. M. A."

BOOK REVIEWS

A Mechanistic View of War and Peace. By George W. Crile. Edited by Amy F. Rowland. Illustrated. 104 pages. Published by The Macmillan Company, New York. 1915. Price, $1.25.

Some one has said that Crile discovered Darwin's Origin of the Species and never got over it. It is indeed well that a few writers have the intelligence to apply the principles of Darwin's philosophy to medical thought. In this present book Crile uses his genius for seeing things from a basic standpoint. He describes the phenomena of war: attack, retreat, trench fighting, artillery fire, fatigue, loss of sleep, effect of injury and pain, courage and death, showing their effects upon the psychic and physiologic reaction and the tissue changes resulting. In the biologic interpretation of war he explains the emotions on which the tendency to combat is built. Fear is the basis of hatred. Games of contest are but miniature battles. Action patterns of war are among the earliest mental acquisitions of childhood. In England sports take the place of the war impulse of the individual, while in Germany the war idea is their national game. The author defines German "Kultur" in its highest biologic interpretation—an altruism based on force. Germany in arms is Nietzsche in philosophy. The individual ally be-

gins by assuming the right of the individual; the German begins by renouncing the right of the individual and recognizes only the right of the state. He leads this to its ultimate application, the conquering army cannot supplant the influence of a hating mother who plants action patterns in the brains of her children. A chapter devoted to the vivisection of Belgium is more explanatory of the principles of psychic phenomena than unneutral in attitude. In looking forward Crile's idea of evolution toward peace seems to indicate the part that woman's emancipation will play in the inhibition of man's lust for murder. It includes the planting of corrected hero pictures in the minds of children. Side by side with the glories of war should be placed the filth, the degradation, the disfigurement, the economic disaster, the hatred and death. Out of tribal jealousy and fear spring the emotions of combat. As we evolved through wreck and struggle, so must evolution carry us through these grosser forms of savage competition. S. T. P.

The Clinical Anatomy of the Gastro-Intestinal Tract. By Wingate Todd, M. B., Ch. B., F. R. C. S., Professor of Anatomy in the Western Reserve University, Cleveland, U. S. A., late Lecturer in Anatomy in the University of Manchester. Crown 8vo.; 264 pages, with 32 illustrations. $1.75. University of Manchester Publication, No. xcix. Longmans, Green & Co., London, New York, Bombay, etc. 1915.

The theory and practice of gastroenterology have been so changed in recent years by the X-ray and by the experience of surgeons that most of the textbooks are hopelessly out of date. To be sure, new editions appear, but often the chapters on X-ray diagnosis, on duodenal ulcer, gastric symptoms in chronic appendicitis, etc., are patches and botched ones at that. They not only do not renovate the garment but they call attention to its defects.

All over the country, hospitals are putting in modern X-ray equipment and men with little or no experience are earnestly trying to diagnose gastrointestinal disease with the new methods. A number of them have asked us—What can we read; where is the book that contains the essentials we need, and, in addition, the references that will give us an entree to the literature? Our perplexity in answering this question has been lessened enormously by the appearance of Dr. Todd's book, which is, in the main, a compact and well written epitome of the recent literature, not only on the anatomy but on the physiology of the digestive tract. A man who is doing any thinking or writing along this line will want it on a convenient shelf with such books as Cannon's "Mechanical Factors of Digestion," Pawlow's "Work of the Digestive Glands," Taylor's "Digestion and Metabolism," Hertz's "Constipation" and "The Sensibility of the Alimentary Canal," Barclay's "Stomach and Esophagus," etc.

One of the most interesting and valuable points about Dr. Todd's book is that he makes use of the anatomic information that has been obtained by means of the X-ray and bismuth meal. Our ideas are changing, and it is to be hoped that before long physicians will become so used to seeing prolapsed stomachs and colons that they will feel no desire to stitch them up somewhere, that they may conform to the picture in Gray's Anatomy.

Dr. Todd has put us all under obligations by giving the titles and correct references to three hundred and fifty articles, dealing with his subject. Anyone who is interested in gastroenterology can read the book from cover to cover like a novel.

W. C. A.

Exercise in Education and Medicine. By R. Tait McKenzie, A. B., M. D., Professor of Physical Education, and Director of the Department, University of Pennsylvania. Octavo of 585 pages, with 478 illustrations. Philadelphia and London: W. B. Saunders Company. 1915. Cloth, $4.00 net; half morocco, $5.50 net.

It is divided into two sections, one on exercise in education and the educational value of exercise, which part is not only interesting, but really fascinating. It gives a very ample résumé of what has been done in various sorts of schools and colleges. Though there is, of necessity, considerable repetition, the repetition is not of the sort to bore the reader, but rather to fix the facts in his mind.

The second part of the book on the use of corrective exercises, etc., is not, to the physician, at least, up to the standard of the first part. The writer is naturally enthusiastic and is therefore over sanguine as to the benefit of exercise in such conditions as scoliosis, hernia, and club-foot. This part of the book is not full enough of explicit direction for one to be able to use it as a practical guide, but it gives a résumé of what has been done, and if the optimism that pervades it is carefully considered it is one that is well worth perusal by anyone interested in this subject.

A. L. F.

What to Eat and Why. By G. Carroll Smith, M. D., of Boston, Mass. Second edition, thoroughly revised. Octavo of 377 pages. Philadelphia and London: W. B. Saunders Company. 1915. Cloth, $2.50 net.

Our interest in dietetics has increased markedly in the last few years if we are to judge by the number of books which have appeared on the subject. If the average physician happens to think of prescribing a diet at all, he will probably tell the patient to take plenty of milk and eggs or he will speak vaguely of plenty of nutritious food.

A book that has been reprinted three times in four years must have brought some satisfaction to men who were seeking to lessen their ignorance on this subject. Looking through the volume we find evidence of much good sense, and we rejoice that the author has raised his voice to protest against some current practices.

For instance, on page 267, he warns against the dangers of suddenly putting large amounts of coarse food into a relaxed and atonic digestive tract, simply because the patient happens to be constipated. On page 270 he remarks upon the increasing dread of laxatives that lately has seized upon patients and physicians. We cannot see why a powerful mechanical irritation should be so much better than a slight chemical stimulus. On page 276, he says coarse foods should be shunned in all cases of hypertonic constipation, as they can only add to the spasm. He might also have remarked that most of the cases that are radioscoped show the spastic type. The article on nephritis is refreshing. He knows that there is no difference practically between red and white meat, or between animal and vegetable protein; he finds his nephritics are no worse on a reasonable protein allowance; and he knows how to use the salt free diet.

The faults that we cannot overlook are those so common to textbooks. The book is padded with much that is irrelevant while important chapters are left weak and insufficient. The trouble may be with us as readers. We will pay six dollars for a 600-page book, but if 500 pages of repetitions, loose and contradictory statements, obsolete methods and illustrations, useless classifications and erroneous statements were edited